

32 Years Ago at MSC

Gemini IV sets world record, White performs space walk

Reprinted from the Space News Roundup June 11, 1965.

"Liftoff. We have a liftoff at 16 minutes after the hour. Climbing very nicely. We have a roll program initiated. Roll program completed, McDivitt reported, and the pitch program has been initiated."

The above description from the Mission Control Center in Houston by Paul Haney, described the beginning of what has been the United States' most spectacular and longest space flight to date, with America's first space pilot going outside a spacecraft.

Liftoff from Launch Complex 19 at Cape Kennedy was at 10:16 a.m., EST, June 3, and flight trajectory was very nearly as planned. The spacecraft with Astronauts James A. McDivitt as command pilot and Edward H. White as pilot was placed in an orbit with a perigee of 100 miles and an apogee of 175 miles.

Earlier that morning at 4:10 a.m., the Gemini IV astronauts were awakened after a night's sleep in the crew's quarters in the Manned Spaceflight Operations Bldg. on Merritt Island. They were given a brief physical and ate breakfast. The crew left for the crew's ready room at Launch Complex 16 and arrived there about 15 minutes later. There, they were suited up by about 7 a.m. and ready to board the van that would carry them to the launch pad. During this period from 5:22 a.m. until they were completely suited up, both astronauts wore an oxygen mask and were breathing pure oxygen to remove the nitrogen from their bodies. The pre-oxygenation was necessary because of the depressurization of the spacecraft for the extravehicular activities on the flight.

They arrived at Pad 19 at about 7:08 and in less than a minute were in the elevator on their way to the Gemini IV spacecraft. By 7:35, McDivitt and White were in the space craft and the hatches were secured.

The launch, scheduled for 9 a.m., was delayed for one hour and 16 minutes because of difficulty in lowering the launch vehicle erector tower. The count, which was near perfect, was held at 34 minutes and 59 seconds while the difficulty was cleared up.

During the first revolution of the spacecraft an attempt was made by Command Pilot McDivitt to rendezvous the Gemini IV with the booster rocket, but the maneuver was called off because excessive fuel was being used to close on the rocket.

The extravehicular activities, scheduled to

be performed during the second revolution of the Earth by Pilot White, were postponed until the third revolution. The decision to go with the "walk in space" on the third revolution was made because preparations for the activity took longer than planned.

After depressurization of the cabin, the hatch was opened and White stood up and started his egress over Hawaii. While outside the spacecraft, White was able to maneuver himself with the special maneuvering unit.

White reported "There's no difficulty in recontacting the spacecraft... I'm very thankful in having the experience to be first (in space)."

White and McDivitt held a running conversation during the entire time of the extravehicular maneuver.

Some of White's observations were, "The sun in space is not blinding but it's quite nice... I can sit here and see the whole California coast... We're looking right down on Houston... This is fun... It's the saddest moment of my life." (the latter reference was to having to return to the cabin from outside the spacecraft).

White reported that no matter what position he seemed to assume while outside the spacecraft, or what kind of whirl he went in to, he was at no time disoriented.

While at the end of the 25-foot umbilical outside the spacecraft, White took pictures with a 35mm camera and McDivitt took movies of White from inside the spacecraft.

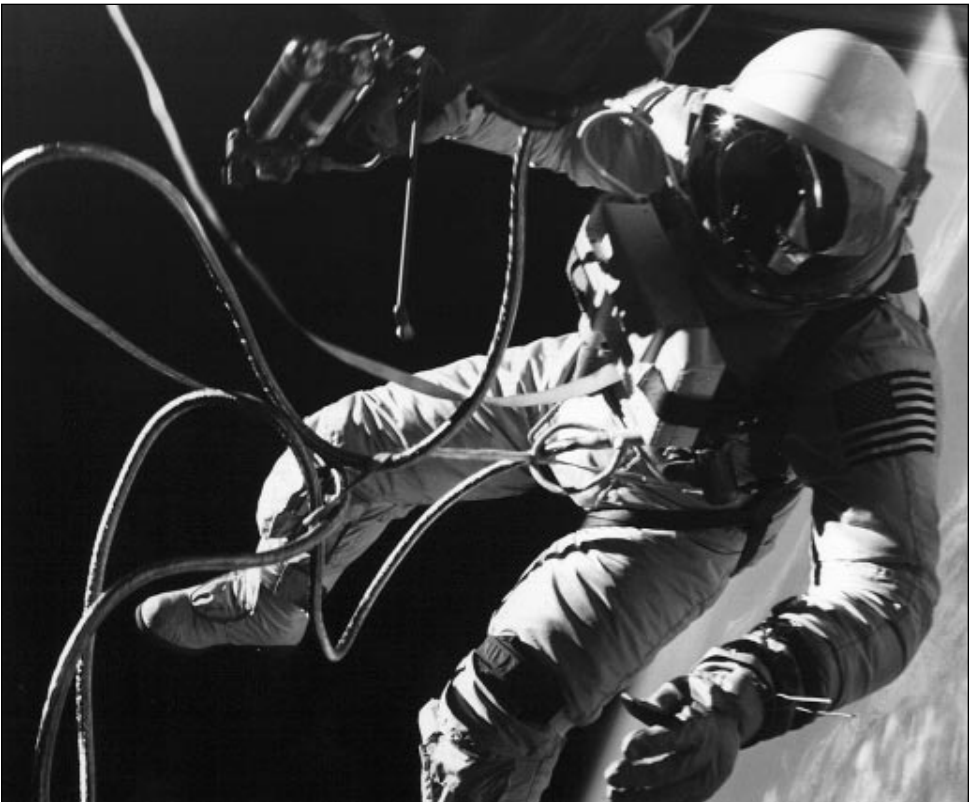
Most of the equipment used in the extravehicular activity was brought inside the spacecraft after the maneuver. The crew reported that White did discard one of his thermal protective gloves and the helmet gold oversvisor.

White spent 20 minutes outside the spacecraft. Some difficulty was experienced in closing the hatch securely at the end of the maneuver but the crew was able to accomplish the closing manually.

Both astronauts talked to their wives who visited Mission Control during the flight.

Space records broken during the flight included: staying aloft longer than any multi-manned spaceship; passing the United States 22.9 orbit duration record set by Astronaut L. Gordon Cooper in 1963; and logging more time in space than the total logged by all eight previous U. S. astronauts.

During the early part of the flight, McDivitt spotted and photographed what he described as a satellite with wings and antennas on it. Attempts were made to identify the object during the mission. Another satellite was spotted later in the flight.



JSC Photos SE5-30433 and S65-22210

Top: Astronaut Ed White performs extravehicular activities while the Gemini IV spacecraft makes its third revolution around the Earth on June 3, 1965. White's gear included a specially designed space suit to protect him from heat and possible meteoroids, a gold plated visor to protect him from the sun's unfiltered rays, an emergency oxygen chest pack, a hand-held self-maneuvering unit to control his movements and a 35 mm camera to take photographs. Above left: Congratulations on a flight that made history and an invitation to spend the weekend at the LBJ ranch in Texas is extended to White (left) and McDivitt by President Johnson. Above right: Mission Director Chris Kraft monitors Gemini IV simulation before the record-setting flight.

The last portion of the flight was spent mostly in making medical evaluations on the effects of the extended space flight and checking the crew's performance and physical condition and performing various experiments. McDivitt was given the OK on the 20th revolution around the Earth to complete

the four-day mission. Chris Kraft, mission director, gave the OK to go the full 62 revolutions.

Touchdown of the spacecraft was just a few minutes after 11 a.m. Houston time, in the Atlantic on Monday. The prime recovery ship was the USS Wasp.

Gilruth Center News

New Hours: The Gilruth is open until 2 p.m. Saturday and closes at 9 p.m. Friday. For details, call x30304.

EAA badges: Required for use of the Gilruth Center. Employees, spouses eligible dependents, NASA retirees and spouses may apply for photo identification badges from 7:30 a.m.-9 p.m. Monday-Friday; and 9 a.m.-2 p.m. Saturdays. Cost is \$10. Dependents must be between 16 and 23 years old.

Softball: Registration is under way for men's double-header softball league. Cost is \$275 per team for a six to seven week season.

NASA Fitness Challenge: runs through Aug. 31. Call x30301 for more information.

Complete Weight Control Program: starts June 24 with sessions on Monday, Wednesday and Friday. For more information call x30301 or x30302.

Hatha Yoga: A stress relieving, stretching and breathing exercise routine to unite body, mind and spirit. Classes meet from 5:30-6:30 p.m. Thursdays. Cost is \$40 for eight weeks.

Nutrition intervention program: A six-week program to learn more about the role diet and nutrition play in health, including lectures, private consultations with a dietitian and blood analysis. Program is open to all employees, contractors and spouses. For more information call Tammie Shaw at x32980.

Defensive driving: One-day course is offered once a month. Next class is June 21. Pre-registration required. Cost is \$25.

Stamp club: Meets at 7 p.m. every second and fourth Monday in Rm. 216.

Weight safety: Required courses for employees wishing to use the weight room will be offered from 8-9:30 p.m. June 12 and 26. Pre-registration is required. Cost is \$5. Annual weight room use fee is \$90. Additional family members are \$50.

Exercise: Low-impact class meets from 5:15-6:15 p.m. Mondays and Wednesdays. Cost is \$24 for eight weeks.

Aikido: Martial arts class meets from 5:15-6:15 p.m. Tuesday and Wednesday. Cost is \$35 per month. New classes begin the first of each month.

Aerobics: Classes meet from 5:15-6:15 p.m. Monday, Tuesdays and Thursdays. Cost is \$32 for eight weeks.

Ballroom dancing: Beginner classes meet from 7-8:15 p.m. Thursdays. Intermediate and advanced classes meet from 8:15-9:30 p.m. Cost is \$60 per couple.

Country and western dancing: Beginner class meets 7-8:30 p.m. Monday. Advanced class meets 8:30-10 p.m. Monday. Cost is \$20 per couple.

Fitness program: Health Related Fitness Program includes a medical screening examination and a 12-week individually prescribed exercise program. For more information call Larry Wier at x30301.

Gilruth Home Page: Check out all activities at the Gilruth online at: <http://www4.jsc.nasa.gov/ah/exceaa/Gilruth/Gilruth.htm>

Ticket Window

The following discount tickets are available for purchase in the Bldg. 11 Exchange Store from 10 a.m.-2 p.m. Monday-Thursday and 9 a.m.-3 p.m. Friday. For more information, call x35350 or x30990.

Loving Feelings Concert: 8 p.m. Sept. 9 at the Summit. Tickets are \$38.

Bus trip: June 15 to Coushatta Indian Reservation Casino. Cost is \$5.

Belize trip: June 22-27. Cost is \$999 per person for divers, \$849 per person for non-divers.

Costa Rica trip: good through June 30. Cost is \$935 per person.

Houston Astros Baseball: Field box seats \$18. Astros vs. Chicago Cubs 7 p.m. June 21. Purchase tickets by June 13. Astros vs. Cleveland Indians 7 p.m. July 2. Purchase tickets by June 23.

EAA cruises: Seven-day cruise to Caribbean leaving from Houston in November. Seven-day Alaskan cruise June 20-28. Prices vary depending on cabin choices. For more information call Dick McMinimy at x34037.

Astroworld: \$22.75. Season pass \$56.75. Multi-visit \$37.50

Waterworld: \$11.50.

Moody Gardens: Tickets are \$9.50 for 2 of 4 events.

Space Center Houston: Adult \$8.95; children (4-11) \$6.40.

Seaworld: Adult \$27.25; children(3-11)\$18.25.

Schlitlerbahn: Tickets are \$20.25 for adults, \$17.50 for children.

Splashtown: Early bird tickets are \$11.50.

Movie discounts: General Cinema, \$5.25; AMC Theater, \$4.50; Sony Loew's Theater, \$4.75.

JSC logo shirts: Polo style, \$23. T-shirt, \$10.

Stamps: Book of 20, \$6.40.

Orbit: The book "Orbit" by Jay Apt, Mike Helfert and Justin Wilkinson is on sale for \$28.

Metro tickets: Passes, books and single tickets available.